

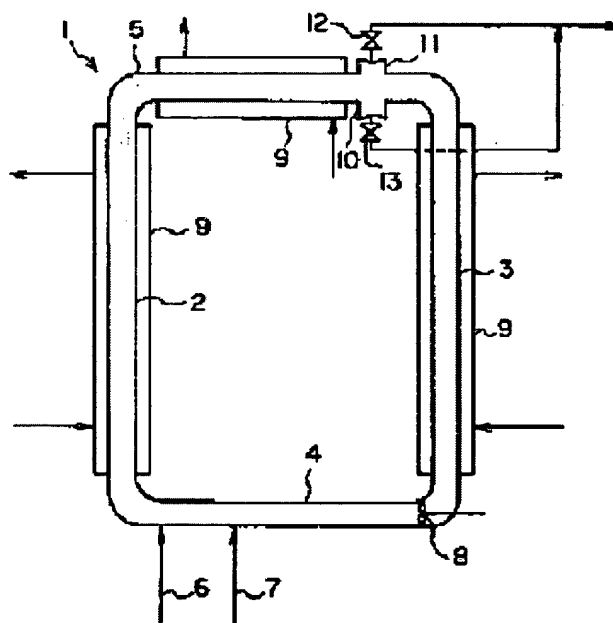
**PRODUCTION OF 1-HEXENE**

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**Abstract of JP10087518**

**PROBLEM TO BE SOLVED:** To produce 1-hexene in preventing attaching of a by-produced polymer to a reactor to maintain a heat-removing efficiency at a high level, by performing a trimerization reaction of ethylene while circulating a reaction solution in an annular flowing path of a loop-type reactor.

**SOLUTION:** The trimerization reaction of ethylene using a chromium-based catalyst by using a loop-type reactor having an annular flowing path while circulating a reaction solution containing ethylene and a chromium-based catalyst in the flowing path. Concretely, e.g. in a case of performing a continuous reaction, a solvent, ethylene, a catalyst, etc., are continuously supplied from introducing pipes 6 and 7 and a reaction solution is continuously extracted from a downward extracting pipe 10, and an annular flowing path comprising a rising pipe 2, a lowering pipe 3, a downward transferring pipe 4 and an upward transferring pipe 5 is circulated by a circulating means 8 such as a turbo-type pump to make a by-produced polymer not deposit on a pipe wall but suspend in the reaction solution. As the catalyst, one comprising a chromium compound, a nitrogen-containing compound, an alkylaluminum compound or a halogen-containing compound is preferable.



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